DOCUMENT RESUME

ED 307 492 CE 052 619

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TITLE Use of the Worker Trait Group Guide with Armed Services Vocational Aptitude Battery Results. A Companion to the Career Exploration and Planning Program (CEPP).
INSTITUTION Appalachia Educational Lab., Charleston, W. Va.
PUB DATE 89
NOTE 13p.; For related document, see CE 052 618.
AVAILABLE FROM Meridian Education Corporation, 236 East Front Street, Bloomington, IN 61701.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Career Choice; Career Education; *Career Exploration; *Career Planning; Interest Inventories; Job Skills; *Military Service; *Occupational Tests; Postsecondary Education; Secondary Education; *Vocational Aptitude; Vocational Interests
IDENTIFIERS *Armed Services Vocational Aptitude Battery

ABSTRACT

This booklet is designed to assist counselors and teachers in working with students and others who have completed the Armed Services Vocational Aptitude Battery (ASVAB). It discusses how ASVAB results of academic, verbal, and math ability may be used as aptitude factors for identifying and exploring worker trait groups, as identified in the Worker Trait Group Guide (available separately). The format of the Worker Trait Group Guide is explained, with emphasis on identifying the military classifications related to the civilian occupations listed under the Worker Trait Groups related to identified interests or other personal attributes. Use of ASVAB results to estimate students' chances of qualifying for entry into a military classification is also described. Information is also provided on how students can use their ASVAB results for exploring nonmilitary careers. (YLB)

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Use of the WTGG with ASVAB Results

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After more than ten years of successful implementation, nationally and worldwide, the Appalachia Educational Laboratory (AEL) has completed the first segment of the comprehensive revision of a proven career guidance program. Originally published in 1978, as the Career Decision-Making Program (CDM), the completely updated materials are now available as the CAREER EXPLORATION AND PLANNING PROGRAM (CEPP).

As part of the CEPP, the Worker Trait Group Guide (WTGG, Revised Edition) is the key linkage between civilian occupations and military counterparts. This booklet, Use of the WTGG with ASVAB Results, was developed to assist counselors and teachers in working with students and others who have completed the ASVAB. As part of the CEPP materials design, ASVAB results of Academic Ability, Verbal, and Math may be used as aptitude factors for identifying and exploring Worker Trait Groups.

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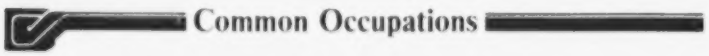
USE OF THE WORKER TRAIT GROUP GUIDE WITH ARMED SERVICES VOCATIONAL APTITUDE BATTERY RESULTS

The *Worker Trait Group Guide*, Revised Edition, can help students use the results of their Armed Services Vocational Aptitude Battery (ASVAB) for career exploration. The *Guide* may be used to help them consider both military and nonmilitary careers.

Military Careers

Once students identify Worker Trait Groups (WTGs) related to their interests or other personal attributes, they can use the *Worker Trait Group Guide* to identify military career opportunities. At the end of each WTG description is a list of common occupations representing major civilian employment opportunities. An example from Worker Trait Group 01.01, Literary Arts, is shown in Illustration A.



Common Occupations

A full listing of all occupations belonging to this group may be found in the Guide for Occupational Exploration.

The following occupations have been selected to represent this group. They provide the major employment opportunities. However, specific job opportunities will vary according to locations of industry, geographical region, and other factors.

Information may be found in common occupational information, state and computerized

Editing

[illegible] Reader
[illegible] Editor, Publications (M)
[illegible] Story Editor
[illegible] Editor, Book
[illegible] Editor, Greeting Card
[illegible] Proofreader (M)
[illegible] Editor, Film (M)

Creative Writing

[illegible] Copy Writer
[illegible] Editorial Writer (M)
[illegible] Humorist
[illegible] Lyricist
[illegible] Playwright

Illustration 'A'

As students review occupations related to WTGs, they can identify those that have military counterparts. These occupations have an (M) after the title. For example, in Illustration A, note the (M) following the titles of some occupations. One or more of the military services offers training, experience, and a career opportunity for each.

Appendix A of the *Worker Trait Group Guide* is an index listing these civilian occupations by Worker Trait Group and shows the branches of service providing opportunities. This index also shows whether the military opportunity is officer or enlisted by the 'O' and 'E' in front of the occupational code and title as shown in Illustration B.

APPENDIX A
Occupations With Military Counterparts

The military services offer training, experience, and career opportunities related to many occupations. In the list of occupations at the end of each Worker Trait Group (WTG) description, the civilian occupations with military counterparts are identified by an (M) following the title. This appendix lists these occupations by Worker Trait Group.

The "O" and "E" in front of the nine digit occupational code indicate that the opportunity is as an officer, enlisted person, or both. The letters following the occupational title identify the branches of services: AR - Army; NA - Navy; AF - Air Force; MC - Marine Corps; and CG - Coast Guard.

The Military Career Guide gives more information about opportunities in the military services. Occupations related to enlisted classifications are found in the DOT Code Index of the Military Career Guide. Use the Index to look up the code for the occupation of interest. Following the code and title is the page number where information may be found. Information about officer related classifications may be found in the officer section of the Military Career Guide.

01 - ARTISTIC

01.01 - LITERARY ARTS

	E	[illegible]	[illegible]	AR	NA	AF	MC	CG
	E	[illegible]	[illegible]	AR	NA	AF	MC	CG
O	E	[illegible]	[illegible]	AR	NA	AF	MC	CG
O		[illegible]	[illegible]	AR	NA	AF	MC	
	E	[illegible]	[illegible]	AR	NA	AF	MC	CG

01.02 - VISUAL ARTS

	E	[illegible]	[illegible]	AR	NA	AF	MC	
			[illegible]	AR	NA	AF	MC	
			[illegible]	AR	NA	AF	MC	
			[illegible]	AR	NA	AF	MC	
						AF	MC	CG

Illustration 'B'

Students can use their ASVAB results to estimate their chances of qualifying for entry into a military classification related to the civilian occupations. Students would use the following steps with the *Military Career Guide* (1988-89 Edition):

1. Check to see if the occupation is related to an enlisted or officer classification (Appendix A, WTG Guide). If it is enlisted, follow Steps 2-5.

   If it is officer, ASVAB results cannot be used to estimate chances of qualifying. However, students can use the *Military Career Guide*

(MCG) for other information about officer qualifications. The MCG Table of Contents lists the page numbers for officer information. In addition to general information the MCG also contains occupational descriptions. These are related to the occupations listed with 'O' in the *WTG Guide*, Appendix A. To locate these occupations, follow Steps 2-4.

2. Write down the nine digit occupational (DOT) code for the occupation of interest from the *WTG Guide*. (Illustration C.)

05.06 SYSTEMS OPERATION

Electricity Generation and Transmission

	822.361.030	Trouble Locator, Test Desk
	950.382.018	Gas Engine Operator (M)
	952.167.014	Load Dispatcher
	952.362.010	Auxiliary Equipment Operator (M)
	952.362.018	Hydroelectric Station Operator
	952.362.022	Power Reactor Operator (M)
	952.362.026	Substation Operator
	952.362.034	Switchboard Operator
	952.362.038	Switchboard Operator
	952.362.042	Turbine Operator
→	952.382.010	Diesel Plant Operator (M)
	952.382.018	Power Plant Operator

Illustration 'C'

3. In the back of the *Military Career Guide*, turn to the DOT Code Index (by DOT number). This index lists the civilian counterpart occupations by DOT codes in numerical sequence. Find the occupational code in the list. (**A** in Illustration D.)

950.382.026	STATIONARY ENGINEER	172	
(A) → 952.362.010	AUXILIARY EQUIPMENT OPERATOR	172	
952.362.022	POWER REACTOR OPERATOR	172	
952.382.010	DIESEL PLANT OPERATOR	172	← (B)

Illustration 'D'

4. Following the code and title is the *MCG* page number where information about related military occupations can be found. (**B** in Illustration D.)

5. The ASVAB Qualification Graph is included as part of the description of enlisted military occupational clusters. (**A** in Illustration E.)

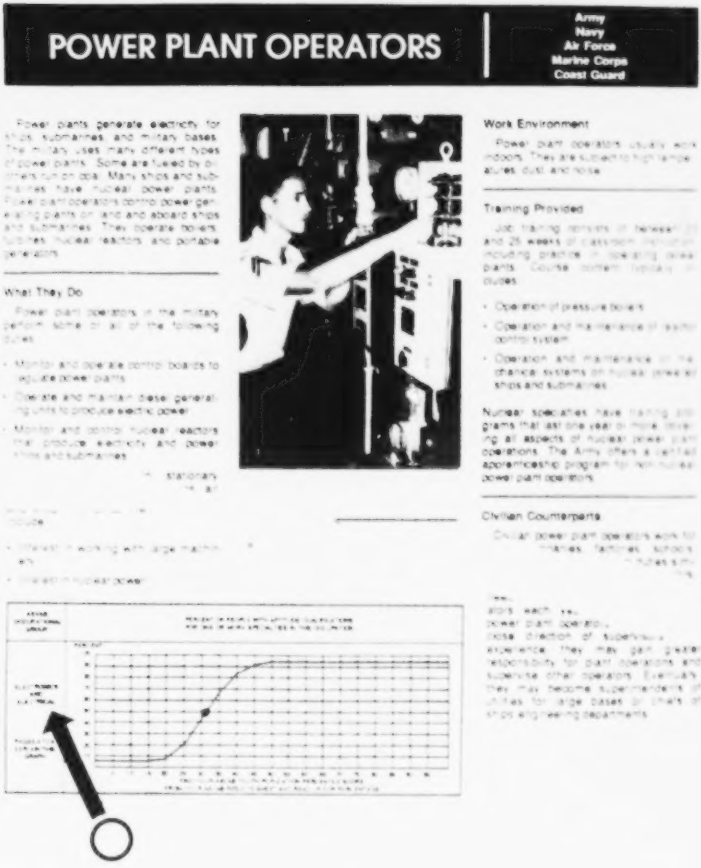


Illustration E

The Graph included in the enlisted military occupational clusters is used to estimate students' chances of qualifying for entry into a training program or at least one occupation in that cluster. Specific steps for using the Graphs are included in the MCG. Briefly they are:

- Identify the ASVAB occupational group on the left side of the Qualifications Graph. (**A** in Illustration E.)

- Find the occupational group score in the Youth Population Percentile Scores section on the student report "Your ASVAB Results." (Illustration F.)

Illustration 'F'

- Use the occupational score for that group and locate its position on the bottom of the ASVAB Graph. (Illustration G, arrow 3.)
- Read up from the score position until you come to the curve line. (Illustration G, arrow 4.)
- Then follow straight across to the left from that point on the curve to the number on the side of the Graph. This number indicates the percentage of the people with the same ASVAB score that qualify for a training program or occupation in the cluster. (Illustration G, arrow 5.)

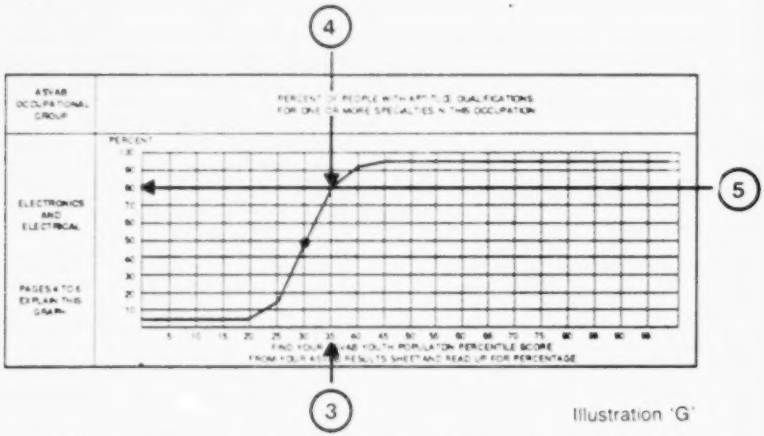


Illustration 'G'

ASVAB results are only part of the qualifications needed for enlisted military classifications. Students need to talk with the branch of service of their interest for specific details.

Non-Military Careers

Students also can use their ASVAB results for exploring non-military careers. In the Youth Population Percentile Scores section of their ASVAB Report, three Academic Score percentiles are shown: Academic Ability, Verbal, and Math. (Illustration H.) These three aptitudes are similar to the aptitudes of G (General Learning Ability), V (Verbal), and N (Numerical) used in the *Worker Trait Group Guide* to report aptitude levels associated with Worker Trait Groups.

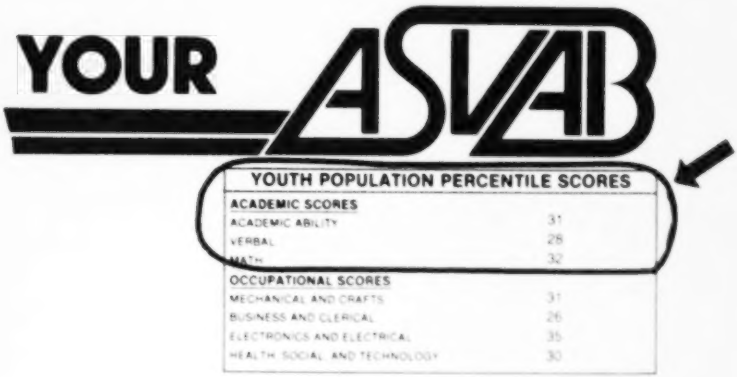


Illustration 'H'

In the WTG Guide, the aptitudes reported for each Worker Trait Group are only those significantly related to job success. (See Illustration I.) Aptitudes that are not reported are not significant to a group.

05.06 SYSTEMS OPERATION

Aptitudes

This chart presents the most important aptitudes related to this group. The levels checked compare aptitudes needed for success in this group to aptitudes of the general working population in all occupations. For example, level 5 is low and represents the bottom 10% of the working population. Level 1 is high and represents the top 10%.

APTITUDE LEVELS COMPARED TO ALL WORKERS							
Related Aptitudes (Ability to Learn)		Lower 1/3		Middle 1/3	Upper 1/3		
		Level 5	Level 4	Level 3	Level 2	Level 1
Code	Title	10%	23%	34%	23%	10%
G	General Learning Ability			* ✓		
S	Spatial		✓	* ✓		
Q	Clerical Perception		✓	* ✓		
M	Manual Dexterity			* ✓		

Illustration 'I'

Aptitudes are reported using five levels (5-low to 1-high). Students exploring Worker Trait Groups use measured or estimated aptitude levels to compare their abilities with those associated with a Worker Trait Group. The aptitude test used to measure the nine aptitudes is the General Aptitude Test Battery (GATB).

Since the GATB aptitudes of G, V, and N are very similar to the ASVAB aptitudes of Academic Ability, Verbal, and Math, these ASVAB aptitudes can be used as general estimates for the GATB aptitudes in the WTG Guide. To use ASVAB percentile scores with the WTG Guide, they must be converted to the five-level reporting structure.

A Chart has been developed to convert ASVAB Youth Population Percentiles to the WTG five levels. (See Chart on page 9.) The conversion process used in developing the Chart included the calculation of a "standard error" band to make adjustment for the preciseness and reliability issues of testing and to represent a range where students' scores would be expected to fall two out of every three times tested. Students can use the tables for Academic Ability, Verbal, and Math contained in the Chart to easily convert their ASVAB percentile scores to the WTG levels.

When comparing a person's aptitude levels with the significant aptitudes reported for a WTG, the following interpretations are made for the five relationships.

a. HIGH person's aptitude level(s) is higher than WTG aptitude (outside of range). There can be no overlap.

WTG	5	4	3	2	1
Person	5	4	3	2	1

b. LOW person's aptitude level(s) is lower than WTG aptitude. There can be no overlap.

WTG	5	4	3	2	1
Person	5	4	3	2	1

c. MATCH person's level(s) is within WTG level(s).

WTG	5	4	**3**	**2**	**1**
Person	5	4	**3**	2	1

d. HIGH MATCH person's aptitude levels overlap WTG levels but are higher.

WTG	5	4	**3**	**2**	1
Person	5	4	3	**2**	**1**

e. LOW MATCH person's aptitude levels overlap the aptitude levels of WTG but are lower.

WTG	5	4	**3**	**2**	1
Person	5	**4**	**3**	2	1

With the above conversion and comparison process, students can use their ASVAB results to compare their aptitudes with three of the most important aptitudes related to WTGs. The WTG aptitude profile also will provide students with information on other significant aptitudes and levels.

Conclusions

Use of ASVAB results, the *Worker Trait Group Guide*, and the *Military Career Guide* can help students explore both military and civilian career fields.

Students should remember that aptitudes are only one of several qualifications needed to enter occupations in the military. They should contact their local recruiter for specific information about qualifying for a particular military service specialty.

Students should also be made aware of changes that may occur in their ASVAB scores if they take ASVAB again, especially if they are sophomores or juniors. They may find their results slightly higher in their senior year as a result of maturation and more education.

CHART FOR CONVERTING ASVAB YOUTH POPULATION PERCENTILES TO WTG APTITUDE LEVELS

ACADEMIC ABILITY		VERBAL		MATH	
ASVAB %ile	DOT Levels	ASVAB %ile	DOT Levels	ASVAB %ile	DOT Levels
1	5	1	5	1	5
2	5	2	5	2	5
3	5	3	5	3	5
4	5	4	5	5	5-4
5	5	5	5	8	5-4
6	5	6	5	12	5-4
8	5-4	7	5	14	5-4
9	5-4	8	5	17	5-4
11	5-4	9	5-4	21	4
12	5-4	10	5-4	26	4
14	5-4	11	5-4	29	4-3
16	4	13	5-4	32	4-3
18	4	14	4	36	4-3
20	4	15	4	39	4-3
22	4	16	4	42	3
25	4	18	4	46	3
26	4	20	4	48	3
29	4-3	22	4	52	3
31	4-3	24	4	53	3
34	4-3	26	4	56	3
37	4-3	28	4-3	59	3
40	4-3	31	4-3	61	3-2
42	3	34	4-3	64	3-2
46	3	36	4-3	67	3-2
49	3	39	4-3	70	3-2
53	3	42	3	73	3-2
57	3	47	3	76	2
61	3-2	50	3	78	2
65	3-2	55	3	80	2
67	3-2	60	3-2	81	2
71	3-2	65	3-2	84	2-1
76	3-2	69	3-2	87	2-1
80	2-1	74	3-2	90	2-1
84	2-1	79	2	92	2-1
87	2-1	84	2-1	96	2-1
92	2-1	88	2-1	98	1
94	2-1	92	2-1	99	1
98	1	96	2-1		
99	1	98	1		
		99	1		

Materials available as part of the AEL Career Exploration and Planning Program (CEPP):

WORKER TRAIT GROUP GUIDE — an educational version of the Guide for Occupational Exploration (GOE) developed by the Department of Labor. The WTG Guide, Revised Edition, contains expanded descriptions of the twelve Career Areas and sixty-six Worker Trait Groups. Each WTG description includes a Qualification Profile identifying important work factors and worker characteristics related to job success and worker satisfaction.

Activities for INDIVIDUALIZED CAREER EXPLORATION — a forty-eight page booklet that provides a career exploration unit for group or self-paced individual use. Self-assessment activities help students understand and relate their interests, temperaments, and aptitudes to the Worker Trait Groups. ASVAB results may be used along with estimated or GATB aptitudes.

CEPP COMPUSORT — an interactive software program designed to assist users in identifying Worker Trait Groups related to their interest and temperaments. Users may enter estimated aptitudes, or GATB and ASVAB results. Printouts of Worker Trait Groups related to interests and temperaments include aptitude relationships. Available in both IBM and Apple formats.

VIDEO TAPE PROGRAMS — optional video tapes with support CEPP materials or can be used independently with other career guidance activities. Available in VHS, BETA, and ¾" Umatic formats. Video tape titles include:

YOUR FUTURE: Planning Through Career Exploration.
YOUR INTERESTS: Related to Work Activities.
YOUR TEMPERAMENTS: Related to Work Situations.
YOUR APTITUDES: Related to Learning Job Skills.

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